PATENT ABSTRACTS OF JAPAN

(11)Publication number:

11-238687

(43) Date of publication of application: 31.08.1999

(51)Int.CI.

H01L 21/205

H01L 33/00

H01S 3/18

(21)Application number: 10-056109

(71)Applicant: RICOH CO LTD

(22)Date of filing:

20.02.1998

(72)Inventor: IWATA HIROKAZU

(54) SEMICONDUCTOR SUBSTRATE AND SEMICONDUCTOR LIGHT-EMITTING DEVICE

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a semiconductor substrate formed of a high-performance GaN based compound semiconductor which exhibits few crystal defects and distortions, a stable crystal quality, and can be manufactured with ease and with high yield. SOLUTION: This semiconductor substrate is formed by stacking a mask 13 for selective growth on which circular pattern holes are disposed periodically on a crystal layer which turns into a selective growth causing layer 12 layered on the surface of a single-crystal substrate 11, and by selectively growing a GaN based compound semiconductor layer 15 through the circular pattern holes for selective growth.



LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of r jection]

[Date of extinction of right]

Copyright (C); 1998,2000 Japan Patent Office